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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,429	07/16/2003	Makoto Mogamiya	P23562	6933

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EXAMINER

YODER III, CHRISS S

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/619,429	MOGAMIYA ET AL.	
	Examiner	Art Unit	
	Chriss S. Yoder, III	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stark (US Patent # 6,924,974) in view of Knapp et al. (US Patent # 6,139,968).
2. In regard to claim 1, note Stark discloses an image pickup device comprising a ceramic package (column 4, lines 64-66) in which said image pickup device is mounted (column 4, lines 26-31), and an optical member which seals a space defined between an image pickup surface of said image pickup device and the optical member within the ceramic package (column 5, lines 23-26 and figure 3), wherein said optical member is provided, on the surface thereof which is opposed to said image pickup surface, with a coating layer (column 7, lines 34-36), said coating layer being adhered to the ceramic package by an adhesive (column 18, lines 37-50).

Therefore, it can be seen that Stark fails to disclose that the coating layer is formed by ion-plating. In analogous art, Knapp discloses the use of a coating layer formed by ion-plating (column 2, lines 18-38). Knapp teaches that the use of a coating layer formed by ion-plating is preferred in order to create a film that is dense and do not spectrally shift upon exposure to varying temperature and humidity conditions (column 2, lines 35-38). Therefore, it would have been obvious to one of ordinary skill in the art

to modify the Stark device to include the use of ion-plating to form the coating layer in order to create a film that is dense and do not spectrally shift upon exposure to varying temperature and humidity conditions, as suggested by Knapp.

3. In regard to claim 2, note Stark discloses that the coating layer formed is made of a single layer (column 7, lines 34-36).

4. In regard to claim 3, note Stark discloses that the coating layer formed is made of a plurality of layers (column 7, lines 34-36).

5. In regard to claim 4, note Stark discloses that the coating layer is made of a single layer (column 7, lines 33-36). And Knapp discloses the use of materials including SiO_2 , Al_2O_3 , ZrO_2 and Ta_2O_5 to form an ion-plating layer (column 2, lines 39-55).

6. In regard to claim 5, note Stark discloses that the coating layer is made of a plurality of layers (column 7, lines 33-36). And Knapp discloses the use of materials including SiO_2 , Al_2O_3 , ZrO_2 and Ta_2O_5 to form an ion-plating layer (column 2, lines 39-55).

7. In regard to claim 6, note Stark discloses that the thickness of the coating layer is in the range of 50 to 150 nm (column 8, line 20 – column 10, line 65; the thickness varies depending on the specific application and types of layers used to form the coating layer).

8. In regard to claim 7, note Stark discloses that the coating layer is formed in a shape of a frame around the peripheral edges of the optical member (figure 3: 318 and figure 8: 318 and 610), said peripheral edges abutting against a stepped portion of the ceramic package (figure 8).

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9. In regard to claim 8, note Stark discloses that the optical member comprises one of an infrared absorption filter, an optical low-pass filter, a color correction filter and a protection glass (column 8, lines 7-29; dependent on the application, any one or multiple of the different coatings can be used to create the optical member).

10. In regard to claim 9, note Stark discloses that the optical member comprises a combination of any of an infrared absorption filter, an optical low-pass filter, a color correction filter and a protection glass (column 8, lines 7-29; dependent on the application, any one or multiple of the different coatings can be used to create the optical member).

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atobe et al. (US Patent # 6,603,159) in view of Stark (US Patent # 6,924,974).

12. In regard to claim 10, note Atobe discloses the use of a coating frame for forming a coating layer onto an optical member (column 16, lines 45-55 and figure 11), said coating frame comprising a frame portion which positions and holds said optical member in a predetermined position (column 16, lines 45-55 and figure 11: 93), a mask portion which is formed inside said frame portion and masks a surface of said optical member (column 16, lines 45-55 and figure 11: 9), and a through-groove which extends through said mask portion, wherein said surface of said optical member, on which said coating layer is to be formed, is exposed via said through-groove (column 16, lines 45-55 and figure 11: 91).

Therefore, it can be seen that Atobe fails to disclose that the optical member which is being coated is used to seal a space defined between an image pickup surface of an image pickup device and the optical member. In analogous art, Stark discloses that the optical member which is being coated is used to seal a space defined between an image pickup surface of an image pickup device and the optical member (column 7, lines 34-36 and figure 8: 610). Stark teaches that use of a coating layer formed on the optical member that seals a space defined between an image pickup surface of an image pickup device and the optical member is preferred in order to hermetically seal the package and protect the electronics from handling and other environmental hazards (column 1, lines 24-33). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Atobe device to be used for forming a coating layer onto an optical member that seals a space defined between an image pickup surface of an image pickup device and the optical member in order to hermetically seal the package and protect the electronics from handling and other environmental hazards, as suggested by Stark.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 20020012062: note the use of an imaging package having multiple optical layers.

US006686653B2: note the use of an imaging package using a combination of adhesive and bonding agents to join components.

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US006623666B1: note the use of an imaging package having different types of optical coatings.

US005838063A: note the use of an imaging package having different types of adhesives.

US005616949A: note the use of an imaging package having an optical member with different types of optical coatings and attached using different types of adhesives.

US004704306: note the use of a mask used for ion-plating an optical element.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chriss S. Yoder, III whose telephone number is (571) 272-7323. The examiner can normally be reached on M-F: 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 14, 2006
CSY



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